

# MICHAEL D. FOX

---

Woods Hole Oceanographic Institution  
Depts. Geology & Geophysics and Biology  
266 Woods Hole Rd. MS 23, Woods Hole, MA 02543

Tel: (619) 922-4310  
Email: mfox@whoi.edu  
Web: mikedfox.com

---

## EDUCATION

- 2018      **Scripps Institution of Oceanography** (SIO), University of California San Diego  
Ph.D. in Marine Biology  
Advisor: Dr. Jennifer Smith
- 2013      **Moss Landing Marine Laboratories** (MLML)  
M.S. in Marine Science  
Advisor: Dr. Michael Graham
- 2008      **University of San Diego**, B.S. in Marine Science

---

## PROFESSIONAL APPOINTMENTS

- 2018 – Pres.    Interdisciplinary Postdoctoral Scholar, Geology & Geophysics and Biology  
**Woods Hole Oceanographic Institution** (WHOI)  
Advisors: Drs. Anne Cohen and Simon Thorrold

---

## PUBLICATIONS (\* mentored students) – Citations: 445    h-index: 12    i10-index: 14

25. **Fox, M.D.**, Nelson, C.E., Oliver, T.A., \*Quinlan, Z.A, Remple, K., \*Glanz, J., Smith, J.E., Putnam, H.M. 2020. Differential resistance and acclimatization of two Hawaiian coral species to chronic nutrient enrichment reflect life history traits. *Functional Ecology* (in Press).
24. Skinner, C., Mill, A.E., **Fox, M.D.**, Newman, S.P., Zhu, Y., Kuhl, A., Polunin, N.V.C. 2021. Pelagic subsidies dominate carbon inputs to coral reef predators. *Science Advances* 7: eabf3792.
23. Sandin, S.A., Edwards, C.B., Pedersen, N.E., Petrovic, V., Pavoni, G., Alcantar, E., \*Chancellor, K.S., **Fox, M.D.**, Stallings, B., Sullivan, C.J., Rotjan, R., Corsinilo, M., Zgliczynski, B.J. 2020. Considering the rates of growth in two taxa of coral across Pacific islands. *Advances in Marine Biology* 87: 167-191.
22. Johnson, M.D., **Fox, M.D.**, Kelly, E.L.A., Zgliczynski, B.J., Sandin, S.A., Smith, J.E. 2020. Ecophysiology of coral reef primary producers across an upwelling gradient in the tropical central Pacific. *PlosOne* 15(2): e0228448.
21. **Fox, M.D.**, Elliot-Smith, E., Smith, J.E., Newsome, S.D. 2019. Trophic plasticity in a common reef-building coral: Insights from  $\delta^{13}\text{C}$  analysis of amino acids. *Functional Ecology* 33: 2203-2214.  
**\*Featured on the journal's blog: *The Functional Ecologist***
20. **Fox, M.D.**, Carter, A.L., Edwards, C.B., Takeshita, Y., Johnson, M.D., Petrovic, V., Amir, C., Sala, E., Sandin, S.A., Smith, J.E. 2019. Limited coral mortality following

- acute thermal stress and widespread bleaching on Palmyra Atoll, central Pacific. *Coral Reefs* 38: 701-712.
19. Miller, S.D., Zgliczynski, B.J., **Fox, M.D.**, Kaufman, L.S., Michener, R.H., Sandin, S.A., Hamilton, S.L. 2019. Niche width expansion of coral reef fishes along a primary production gradient in the remote central Pacific. *Marine Ecology Progress Series* 625: 127–143.
  18. Zgliczynski, B.J., Williams, G.J., Hamilton, S.L., Corder, E.G., **Fox, M.D.**, Eyraud, Y., Michener, R.H., Kaufman, L.S., Sandin, S.A. 2019. Foraging consistency of coral reef fishes across environmental gradients in the central Pacific. *Oecologia* 191:433-445.
  17. Carter, A.C., Edwards, C.B., **Fox, M.D.**, Amir, C., Johnson, M.D., Lewis, L.S., Sandin, S.A., Smith, J.E. 2019. Spatial and temporal dynamics of the corallimorph, *Rhodactis howesii*, at Palmyra Atoll. *Coral Reefs* 38: 1267-1279
  16. Radice, V.Z., Brett, M.T., Fry, B., **Fox, M.D.**, Hoegh-Guldberg, O., Dove, S.G. 2019. Evaluating coral trophic strategies using fatty acid composition and indices. *Plos One* 14(9): e0222327.
  15. Wegley-Kelly, L., Haas, A.F., Nelson, C.E., Naliboff, D., Calhoun, A., Carlson, C.A., Edwards, R.A., **Fox, M.D.**, et al. 2019. Diel population and functional synchrony of microbial communities on coral reefs. *Nature Communications* 10, 1691.
  14. Radice, V.Z., Hoegh-Guldberg, O., Fry, B., **Fox, M.D.**, Dove, S.G. 2019. Coral isotopic compositions across the reef slope: Indicators of upwelling in a remote atoll system. *Functional Ecology* 33:1120-134.
  13. **Fox, M.D.**, Williams, G.J., Johnson, M.D., Radice, V.Z., Zgliczynski, B.J., Kelly, E.L.A., Rohwer, F., Sandin, S.A., Smith, J.E. 2018. Gradients in primary production predict the trophic strategies of mixotrophic corals at multiple spatial scales. *Current Biology* 28:1-9.  
**\*Highlighted Article with commentary**  
[Wiedenmann and D'Angelo 2018. Symbiosis: High-carb diet of reef corals as seen from space. \*Current Biology\* Dispatch, 28 R1243-R1265.](#)
  12. Silbiger, N.A., Nelson, C.A., Remple, K., Sevilla, J., Quinlan, Z., Putnam, H., **Fox, M.D.**, Donahue, M. 2018. Nutrient pollution disrupts key ecosystem functions on coral reefs. *Proceedings of the Royal Society - Biology* 285: 20172718.
  11. Williams, G.J., Sandin, S.A., Zgliczynski, B.J., **Fox, M.D.**, Gove, J.M., Rogers, J.S., Furby, K.A., Hartman, A., Caldwell, Z.R., Price, N.N, Smith, J.E. 2018. Biophysical drivers of coral trophic depth zonation. *Marine Biology* 165: 60.
  10. Quinlan, Z.A., Remple, K., **Fox, M.D.**, Silbiger, N.J., Sevilla, J.K., Oliver, T.A., Putnam, H.M., Wegley-Kelly, L., Carlson, C.A., Donahue, M.J., Nelson, C.E. 2018. Fluorescent organic exudates of corals and algae on tropical reefs are compositionally distinct and increase with nutrient enrichment. *Limnology and Oceanography Letters* 3: 331-430.
  9. Moritz, C., Ducarme, F., Sweet, M., **Fox, M.D.**, Zgliczynski, B.J., Ibrahim, N., Basheer, A., Furby, K.A., Caldwell, Z.R., Pisapia, C, Grimsditch, G, Abdulla, A. 2017. The “resort effect”: can tourist islands act as a refuge for coral reef species? *Diversity and Distributions* 23: 1301-1312.

8. **Fox, M.D.** 2016. Biomass loss reduces growth and resource translocation in giant kelp, *Macrocystis pyrifera*. *Marine Ecology Progress Series* 562: 65-77.
7. Nakajima, R., Nakatomi, N., Kurihara, H., **Fox, M.D.**, Smith, J.E., Okaji, K. 2016. Crown-of-thorns starfish larvae feed on organic matter released from corals. *Diversity* 8:4.
6. Enochs, I.C., Manzello, D.P., Donham, E., Kolodziej, G., Okano, R., Johnston, L., Young, C., Iguel, J., Edwards, C., **Fox, M.D.**, et. al. 2015. Shift from coral to macroalgal dominance on a volcanically acidified reef. *Nature Climate Change* 5: 1083-1088.
5. Foley, M.M., Martone, R.G., **Fox, M.D.**, Kappel, C.V., Mease, L.A., Erickson, A.L., Halpern, B.S., Selkoe, K.A., Taylor, P., Scarborough, C. 2015. Using ecological thresholds to inform resource management: current options and future possibilities. *Frontiers in Marine Science* 2:95.
4. Adey, W., Halfar, J., Humphreys, A., Suskiewicz, M., Belanger, D., Gagnon, P., **Fox, M.D.** 2015. Subarctic rhodolith beds promote longevity of crustose coralline algal buildups and their climate archiving potential. *Palaios* 30: 281-293.
3. **Fox, M.D.\*** 2013. Resource translocation drives  $\delta^{13}\text{C}$  fractionation during recovery from disturbance in giant kelp, *Macrocystis pyrifera*. *Journal of Phycology* 49: 811-15.  
\*Nominated as a featured article by the editorial board
2. Gray, S.C., Sears, W.T., Kolupski, M.L., Hastings, Z.C., Przyuski, N.W., **Fox, M.D.**, DeGroot, A. 2012. Factors affecting land-based sedimentation in coastal bays, US Virgin Islands. *Proceedings of the 12<sup>th</sup> International Coral Reef Symposium*, Cairns, Australia, 9-13 July, 21A2.
1. Dikou, A., Ackerman, C., Banks, C., Dempsey, A., **Fox, M.D.**, et al. 2009. Ecological assessment to detect imminent change, Admiral Cockburn Land and Sea National Park, Turks and Caicos Islands. *Marine Ecology* 30: 425-436.

### **Book Chapters**

Graham, M.H., **Fox, M.D.**, and Hamilton, S.L. 2016. Macrophyte productivity and the provisioning of energy and habitat to nearshore systems. In: *Marine Macrophytes as Foundation Species* (ed. Olafsson, E.), Science Publisher/CRC Press, Boca Raton, FL. ISBN 978-1-498-72324-4, pp. 131-160.

### **In Review or Revision (\* mentored students)**

**Fox, M.D.**, Cohen, A.L., Rotjan, R., Mangubhai, S., Sandin, S.A., Smith, J.E., Thorrold, S., \*Dissly, L., Mollica, N.R., Obura, D. Shifting thermal thresholds facilitate coral reef resilience through multiple heatwaves. *In review*

Elliott-Smith, E.A. and **Fox, M.D.** Characterizing energy flow in kelp forests: a geochemical review and call for additional research. *In revision*

Remple, K.L., Silbiger, N.J., Quinlan, Z.A., **Fox, M.D.**, Wegley Kelly, L., Donahue, M.J., Nelson, C.E. Coral reef biofilm bacterial diversity and successional trajectories respond to reef benthic composition and chronic nutrient enrichment. *In review*

Roche, R. Heenan, A., Taylor, B., Schwarz, J., **Fox, M.D.**, Southworth, L., Williams, G., Turner, J. Linking variation in planktonic primary production to reef fish growth and condition. *In revision*

Calhoun, S. Haas, A., Takeshita, Y. Johnson, M.D., **Fox, M.D.**, Kelly, E.L.A., Mueller, B., Price, N., Vermeji, M.J.A., Kelly, L.W., Nelson, C.E., Rohwer, F.L., Smith, J.E. Exploring the occurrence of and explanations for nighttime dissolved oxygen spikes across coral reef environments. *PeerJ preprint*

## HONORS & AWARDS

---

2018 *Institutional Postdoctoral Scholarship*, WHOI  
2018 *Seal of Excellence*, Marie Skłodowska-Curie Fellowship, European Union  
2017 *Achievement Award for College Scientists*, ARCS Foundation  
2016 *Best Student Paper, honorable mention*, International Coral Reef Symposium  
2013 *Nancy Foster Scholarship*, NOAA (1 of 3 awarded nationally)  
2011 *Best Student Paper, honorable mention*, Western Society of Naturalists  
2008 *Outstanding Undergraduate Research Award*, University of San Diego  
2007 *Best Student Research*, School for Field Studies

## RESEARCH FUNDING [\$970,216 awarded to date]

---

### **Pending Proposals**

1. NSF, Biological & Physical Oceanography - *The Biophysics of Coral Reef Resilience: Hydrodynamic and Ecological Drivers of Coral Survival Under Extreme Heat*
2. UN Ocean Decade Ocean Shots, **Co-PI** of selected submission

### **Major awards**

2020 – 2021	<i>Super Reefs: Resilience based management in the Marshall Islands</i> , Arthur Vining Davis Foundation <b>Co-PI</b> with Anne Cohen and W. Zhang	\$365,662
2019 – 2020	<i>Catalyst Program</i> for coral reefs, WHOI <b>Co-PI</b> with A. Cohen, W. Zhang, Y. Girdhar, and J. Bellingham	\$75,000
2018 – Pres.	<i>Postdoctoral Scholarship</i> , WHOI	\$120,000
2017	<i>Ralph Lewin Fellowship in Marine Biology</i> , SIO	\$31,000
2013 – 2017	<i>Nancy Foster Scholarship</i> , NOAA	\$188,000
2013	<i>STAR Fellowship</i> , EPA [declined to accept Nancy Foster]	\$126,000
2013	<i>Scripps Fellowship</i> , Scripps Institution of Oceanography, [declined]	\$25,000

### **Minor awards**

2018	<i>Student Fellowship</i> , International Society for Isotope Ecology	\$750
2018	<i>Graduate student Excellence</i> , SIO	\$1,000
2017	<i>ARCS Scholarship</i> , ARCS Foundation	\$7,500
2017	<i>Lerner-Gray Fund</i> , American Museum of Natural History	\$1,960
2017	<i>Lewis and Clark Exploration Fund</i> , American Philosophical Society	\$3,000
2017	<i>Research and Travel Award</i> , SIO	\$1,000
2017	<i>Graduate student Excellence</i> , SIO	\$1,000
2016	<i>Research and Travel Award</i> , Grad. Student Association, UCSD	\$300

2016	<i>Graduate Student Excellence, SIO</i>	\$1,000
2015	<i>Research and Travel Award, Grad. Student Association, UCSD</i>	\$500
2012	<i>Hoshaw Travel Award, Phycological Society of America</i>	\$900
2012	<i>John H. Martin Scholarship, Moss Landing Marine Labs</i>	\$3,000
2012	<i>COAST Research Award, California State Universities</i>	\$3,000
2011	<i>Kevin Gurr Scholarship, AAUS</i>	\$1,500
2011	<i>Zale Parry Scholarship, Academy of Underwater Arts &amp; Sciences</i>	\$3,000
2011	<i>Meyers Grant, Myers Oceanographic and Marine Biology Trust</i>	\$1,000
2011	<i>Research and Travel Grant, David and Lucile Packard Foundation</i>	\$1,000
2011	<i>Excellence in Marine Science Award, Underwater Society of America</i>	\$500
2010	<i>California Diving &amp; Aquatic Studies Scholarship, CEN CAL</i>	\$1,000
2007	<i>Summer Undergraduate Research Grant, University of San Diego</i>	\$6,644

### **POSITIONS HELD**

---

2017 – Pres.	<u>Scientific Advisor</u> , California Seaweed Co.
2013 – 2018	<u>Graduate Student Researcher</u> , Scripps Institution of Oceanography
2012 – 2013	<u>Consultant for green algal aquaculture</u> , Vascular Health Services
2011 – 2013	<u>Aquaculture technician</u> , Monterey Bay Seaweeds
2010 – 2013	<u>Contract diver</u> , US Naval Postgraduate School and NOAA
2009 – 2013	<u>Research intern</u> , Center for Ocean Solutions, Stanford University
2012	<u>Aquaculture Consultant</u> , Bio Architecture Labs

### **INVITED TALKS**

---

2020	University of Rhode Island, Graduate School of Oceanography
2020	University of North Carolina Wilmington, Center for Marine Science
2020	WHOI Biology Department
2020	WHOI Marine Chemistry and Geochemistry Department
2019	Moss Landing Marine Laboratories
2019	Center for Stable Isotopes, University of New Mexico
2019	NOAA National Marine Sanctuaries Webinar Series
2018	Smithsonian Marine Station, Ft. Pierce, FL
2017	University of New Mexico
2017	San Diego State University
2017	UC San Diego
2016	Palmyra Atoll Research Consortium
2015	Maldives National University

### **CONFERENCE CONTRIBUTIONS (select oral presentations)**

---

2021	International Coral Reef Symposium, Bremen, Germany * <i>Session Chair – What are the roles of nutrients in coral reef survival?</i> * <i>Oral presentation and co-author of 8 additional abstracts</i>
2019	American Geophysical Union, San Francisco, CA * <i>Invited talk (session: Development and application of coral proxies for ocean change)</i> * <i>Co-author of invited talk (session: Multiple isotope patterns within organic compounds: determining the biogeochemical and environmental drivers)</i>
2018	Stable Isotope Ecology Meeting (IsoEcol), Viña del Mar, Chile

- 2016 Western Society of Naturalists, Monterey, CA
- 2016 International Coral Reef Symposium, Honolulu, HI  
\*Best student paper honorable mention
- 2014 Ecological Society of America Annual meeting, Sacramento, CA
- 2012 Western Society of Naturalists, Seaside, CA
- 2012 Phycological Society of America, Charleston, SC
- 2011 Western Society of Naturalists, Vancouver, WA  
\*Best student paper honorable mention

**MENTORING** (3 graduate and 18 undergraduate and high school students since 2014)

---

***Graduate students***

- 2019 Laura Dissly, *Northeastern University, Three Seas Program* (MS)
- 2016 Brant Chlebowski, *UC San Diego, Master's of Advanced Studies* (MAS)
- 2015 Breck Archer, *UC San Diego, Master's of Advanced Studies* (MAS)

***Undergraduate students***

- 2020 Claire Zobel, Mamaroneck High School
- 2019 Ellen Park, *WHOI Summer Student* \*Currently PhD student at WHOI
- 2018 Michael Carlson, *UC San Diego*  
Amanda Leu, *UC San Diego*  
Cassandra Paumard, *UC San Diego*  
Jessica Glanz, *UC Santa Cruz* (2016-2018) \*Currently MS student at CSU Northridge
- 2017 Ellis Juhlin, *UC San Diego* (2016-2017) \*Currently MS student at Utah State University  
\*Best student poster award at Scripps undergraduate research symposium  
Spencer Breining-Aday, *UC San Diego* (2016-2017) \*Currently at Cal. Fish and Game  
Mario Gaytan, *UC San Diego* (2016-2017)
- 2016 Alex Reich, *UC San Diego* \*Currently with National Parks Service  
Ellen Williams, *Victoria University, NZ* \*Currently MS student at Leiden University  
\*Best student poster award at Scripps undergraduate research symposium  
Mikaela Ragazzao, *University of San Diego*
- 2015 Annika Vawter, *UC Santa Barbara* (2015-2017) \*Currently MAS student at Scripps  
Steven Deah, *UC San Diego* (2014 – 2015)
- 2014 Mallory Rice, *Sanoma State* \*Currently Postdoc at San Francisco State University  
Laura Grossman, *Scripps College*  
Dane Ferrari-Esias, *UC San Diego*  
Emily Miller, *UC San Diego*

**TEACHING EXPERIENCE**

---

- 2019 Guest lecturer, Coral Reef Ecology Course, Bermuda Institute of Ocean Sciences
- 2018 Guest lecturer, Intro to Marine Biology, UC San Diego
- 2018 Guest lecturer, Student Sustainability Collective, UC San Diego
- 2018 Guest lecturer, Phycology, Scripps Institution of Oceanography
- 2018 Teaching Assistant, Phycology, Scripps Institution of Oceanography

- 2015 Instructor, Coral Reef Monitoring Workshop, *IUCN*, Maldives  
 2010 – 2011 Instructor (5 classes) and teaching assistant, Scientific diving, MLML

## **PROFESSIONAL DEVELOPMENT**

---

- 2017 Visiting Scholar, NOAA Office of National Marine Sanctuaries, Honolulu, HI  
 2017 Survivor's Guide to Stable Isotope Ecology Short Course, Sicily, Italy  
 2015 Light and Photosynthesis on Coral Reefs Short Course, Puerto Morelos, Mexico  
 2013 Ocean Conservation Leadership Practicum, Stanford University  
 2012 Interdisciplinary Marine Science Short Course, Stanford University  
 2011 Developer, Climate Change and Monterey Bay Workshop, Stanford University  
 2011 Ocean Policy & Marine Conservation Short Course, Stanford University  
 2010 Communicating science to policy makers workshop, Stanford University  
 2005 National Outdoor Leadership School (NOLS)

## **ACADEMIC SERVICE AND COMMUNITY OUTREACH**

---

- 2021 Educational workshop on implicit bias  
 2021 Unlearning Racism in the Geosciences (URGE) working group (16 weeks)  
 2021 WHOI Postdoctoral Representative for Initiative to Improve Supervisor Training  
 2019 – Pres. IUCN Coral Specialists Group  
 2019 – Pres. WHOI Laboratory tours for undergraduate students  
 2019 – Pres. Letters to a scientist program, Colonial Park Elementary School, Stoneham, MA  
 2019 – Pres. Classroom visits for meet a scientist day, Elementary and Middle Schools, MA  
 2017 Public comment review for National Marine Sanctuaries and Monuments, NOAA  
 2017 NOAA Get into your Sanctuary Day, Waikiki Aquarium  
 2017 Chasing Coral Premier, Waikiki Aquarium, NOAA  
 2016 – 2018 Annual Career Day, Muirlands Middle School, La Jolla, CA  
 2016 Founding member, Interdisciplinary Stable Isotope Forum, SIO, UCSD  
 2015 Meet a Scientist Day, Molokai, HI  
 2014 Organizer, Marine Biology Seminar Series, SIO  
 2012 Committee Member, Regional Water Management Plan, Monterey County, CA.  
 2012 Moss Landing Marine Labs tours for inner city youth  
 2011 – 2012 Volunteer diver, Marine Advanced Technology Education ROV contest  
 2010 – 2013 Student liaison, Monterey Area Research Institutions Network for Education (MARINE), Stanford University  
 2010 – 2013 Member, Diving Control Board, Moss Landing Marine Labs  
 2010 – 2011 Secretary, graduate student association, Moss Landing Marine Labs  
 2008 – 2009 Bay Host, Virgin Islands National Park  
 2008 Coral Bay Community Youth Rally, St. John, USVI

## **MEDIA AND PRESS**

---

Featured on the Functional Ecologists blog:

<https://functionalecologists.com/2019/09/18/michael-fox-variable-diets-of-coral-reefs/>

Co-authored an article for **The Conversation** (>2500 reads):

*We tracked coral feeding habits from space to find out which reefs could be more resilient*

<https://theconversation.com/we-tracked-coral-feeding-habits-from-space-to-find-out-which-reefs-could-be-more-resilient-105107>

Nancy Foster Scholar Spotlight for NOAA National Marine Sanctuaries

<https://sanctuaries.noaa.gov/news/mar18/the-coral-doctor-foster-scholar-michael-fox.html>

### **SEAGOING EXPERIENCE (>272 days at sea)**

---

2021 National Geographic – Southern Line Islands – (Postponed due to COVID-19)  
2019 *R/V Grampian Frontier* (Bangor Uni.) – British Indian Ocean Territory (25 days)  
2018 *S/Y Sea Dragon* (WHOI) – Phoenix Islands, Kiribati (30 days)  
2017 *M/Y Palau Siren* (SIO) – Remote SW Islands of Palau (14 days)  
2015 *M/Y Theia* (IUCN) – North Ari Atoll, Maldives (14 days)  
2014 *R/V Hi'ialakai* (NOAA PIFSC) – Maug, Mariana Islands (10 days)  
2013 *M/Y Hanse Explorer* (SIO) – Southern Line Islands, Kiribati (28 days)  
2013 *S/Y Alca I* (Smithsonian) – Labrador, Canada (60 days)  
2009 *R/V Nathaniel B. Palmer* (USAP) – SE Weddell Sea, Antarctica (40 days)  
2005 – 2012 >30 single day cruises on regional class vessels involving CTD, multicore, trawl surveys, diving, and ROV missions. Institutions: SIO, MLML, and MBARI.

### **SHORE BASED FIELD EXPERIENCE**

---

2020 Palmyra Atoll (15 days)  
2019 Bermuda Institute of Ocean Sciences (Expedition Leader – 10 days)  
2018 Kiritimati, Kiribati (8 days)  
2017 Hawai'i Institute of Marine Biology (Expedition Leader – 14 days)  
2017 Smithsonian Tropical Research Institute, Bocas del Toro, Panama (14 days)  
2016 Palmyra Atoll (Expedition Leader – 28 days)  
2016 Palmyra Atoll (7 days)  
2017 Hawai'i Institute of Marine Biology (Expedition Leader – 14 days)  
2015 Maui, Hawai'i (14 days)  
2015 Palmyra Atoll (22 days)  
2015 Hawai'i Institute of Marine Biology (Expedition Leader – 70 days)  
2015 Universidad Nacional Autonoma de Mexico, Puerto Morelos, Mexico (21 days)  
2014 Palmyra Atoll (22 days)  
2012 Universidad de los Lagos, Puerto Montt, Chile (21 days)  
2011 Wrigley Institute for Environmental Science, Catalina Island (14 days)  
2009 – 2013 California kelp forests from San Diego to Santa Cruz (>250 dives)  
2008 – 2009 Virgin Islands Environmental Resource Station, St. John, USVI (13 months)  
2007 Virgin Islands Environmental Resource Station, St. John, USVI (30 days)  
2007 School for Field Studies, Turks and Caicos Islands, (4 months)

### **CERTIFICATIONS and SKILLS**

---

AAUS, SIO (100') >1,000 scientific dives  
NAUI Scuba Instructor  
NAUI Nitrox  
NAUI First aid, CPR & O<sub>2</sub> Instructor  
DAN Oxygen Administration



Drysuit and cold-water diving – extensive experience in the Canadian subarctic (~100 dives)  
Small boat operations – extensive experience in coastal & offshore navigation  
- 8-15 ft. zodiacs, 16-23 ft. skiffs, and 25 ft. RHIBs

### **PEER REVIEW**

---

Bul. of Marine Science · Climatic Change · Coral Reefs · Ecology · Environmental  
Microbiology · Functional Ecology · Global Change Biology · Journal of Animal Ecology ·  
Limnology and Oceanography · Marine Ecology Progress Series · Oecologia · PeerJ · Royal  
Society Open Science · Scientific Reports · Science of the Total Environment

### **PROFESSIONAL MEMBERSHIPS**

---

American Association for the Advancement of Science (AAAS)  
American Academy of Underwater Sciences (AAUS)  
American Geophysical Union  
International Society for Reef Studies  
Phycological Society of America  
Western Society of Naturalists